Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Aristolochic Acid B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>A6933</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>IIBRN 0329754; CCRIS 6497</td>
</tr>
<tr>
<td>Supplier</td>
<td>LKT Laboratories, Inc</td>
</tr>
<tr>
<td></td>
<td>545 Phalen Blvd.</td>
</tr>
<tr>
<td></td>
<td>St. Paul, MN 55130 USA</td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

Section 2. Hazards Identification

GHS Classification
Carcinogenicity (Category 1A), H350

GHS Label elements including precautionary statements

<table>
<thead>
<tr>
<th>Pictogram</th>
<th>Danger</th>
</tr>
</thead>
</table>
| Signal word
Hazard and precautionary statements
H350 - May cause cancer.
Precautionary statements
H350 - May cause cancer.
P201 - Obtain special instruction before use.
P202 - Do not handle until all safety precautions have been read and understood.
P281 - Use personal protective equipment as required.
P308 + P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification
Health hazard: 0
Chronic health hazard: 0
Flammability: 0
Physical hazard: 0

NFPA Rating
Health hazard: 0
Fire hazard: 0
Reactivity hazard: 0

Potential Health Effects
Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
Skin - May be harmful if absorbed through skin. May cause skin irritation.
Eyes - May cause eye irritation.
Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula C_{16}H_{9}NO_{6}</td>
<td>Formula Wt. 311.25</td>
</tr>
<tr>
<td>CAS No. 475-80-9</td>
<td>EC No.</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

General advice

Move out of dangerous area.

Eye Contact

Flush eyes with water as a precaution.

Skin Contact

Wash off with soap and plenty of water.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5. Firefighting Measures

Flash Point

Not available.

Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Firefighting Procedures

Wear self-contained breathing apparatus for fire fighting if necessary.

Unusual Fire Hazards

Carbon oxides, nitrogen oxides (NOx).

Section 6. Accidental Release Measures

Personal Precautions

Avoid dust formation. Avoid breathing vapors, mist, or gas.

Environmental Precautions

No special environmental precautions required.

Methods and materials for containment and cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20˚C

Storage class (TRGS 510): Non combustible solids.

Hazardous Decomposition Products

Not available.

Other Remarks
### Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**EXPOSURE CONTROLS**
Contains no substances with occupational exposure limit values.

**GENERAL INDUSTRIAL HYGIENE PRACTICE**

**PERSONAL PROTECTION**

**Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>Yellow powder.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Volatility</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Density</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>pH</td>
</tr>
<tr>
<td>Soluble in DMSO or ethanol.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Ignition temperature</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Autoignition temperature</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Vapor pressure</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Odor</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Odor Threshold</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Evaporation rate</td>
</tr>
<tr>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and Reactivity

**Stability**
Stable under recommended storage conditions.

**Materials To Avoid**
Strong oxidizing agents.

**Hazardous Decomposition Products**
Not available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral LD50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation LC50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dermal LD50</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other information on acute toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Reproductive Toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Aspiration Hazard</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Synergistic effects</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Signs and symptoms of exposure</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>RTECS</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

#### Potential Health Effects

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: May be harmful if swallowed.
- Carcinogenicity: May cause cancer.

#### Carcinogenicity

- **IARC:** Group 1: Carcinogenic to humans (Aristolochic acid B). No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
- **ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **NTP:** Known to be human carcinogen (Aristolochic acid B).
- **OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Mobility in soil</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>PBT and vPvB</strong></td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/not</td>
</tr>
</tbody>
</table>
Waste Disposal

Dispose of material according to all federal, state, and local regulations. Offer material to a licensed, professional waste disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of as unused product.

Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

DOT (US)  
UN number: 1544  
Class: 6.1  
Packing group: III  
Proper shipping name: Alkaloids, solid, n.o.s. (Aristolochic Acid B)  
Marine pollutant: No  
Poison Inhalation Hazard: No.

IATA  
Not dangerous goods.

IMDG  
Not dangerous goods.

Further Information

Section 15. Regulatory Information

Reach No.

SARA 302 Components  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components  
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Components  
Chronic health hazard.

Massachusetts Right To Know Components  
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components  
Aristolochic Acid B  
CAS No.: 475-80-9  
Revision Date:

New Jersey Right To Know Components  
Aristolochic Acid B  
CAS No.: 475-80-9  
Revision Date:

California Prop 65 Components  
WARNING! This product contains a chemical known to the State of California to cause cancer.  
Aristolochic Acid B  
CAS No.: 475-80-9  
Revision Date: 2007-09-28

Section 16. Other Information

The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.